

EH01 Elektrolyt zum elektro-chemischen Signieren von Stahl, Edelstahl

Material number EH01

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: EH01 Elektrolyt zum elektro-chemischen Signieren von Stahl, Edelstahl

1.2 Relevant identified uses of the substance or mixture and uses advised against

General use: Electrolytic/electrochemical metal inscription

1.3 Details of the supplier of the safety data sheet

Company name: GIMA e.K.

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1.4 Emergency telephone number

Michel J. Girard,

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

This mixture is classified as not hazardous.

2.2 Label elements

Labelling (CLP)

Hazard statements: not applicable

Precautionary statements: not applicable

Special labelling

EUH210

Safety data sheet available on request.

2.3 Other hazards

Intake of larger quantities can cause stomach troubles. damage of kidneys

Inhaling hazardous decomposing products can cause serious health damage. Pulmonary

edema is possible.

Results of PBT and vPvB assessment:

No data available

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SECTION 3: Composition / information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Aqueous solution

Hazardous ingredients:

Ingredient	Designation	Content	Classification
EC No. 231-818-8 CAS 7757-79-1	Potassium nitrate	5 - 10 %	Ox. Sol. 3; H272.

Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

In case of inhalation: In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still. Seek medical attention.

Following skin contact: Wash with plenty of water. Change contaminated clothing.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

After swallowing: Rinse mouth with water. Give affected person large quantities of water, better milk. Induce vomiting. Seek medical attention. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

In case of inhalation:

Inhaling hazardous decomposing products can cause serious health damage. Pulmonary edema is possible.

Symptoms may occur with delay.

In case of ingestion:

Intake of larger quantities can cause stomach troubles. damage of kidneys

After eye contact: May cause irritations.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Use extinguishing material as appropriate for the surrounding area.

5.2 Special hazards arising from the substance or mixture

Emits toxic fumes under fire conditions. (nitrogen oxides (NOx))

In the event of a fire, the following may be produced when the water evaporates::
potassium compounds

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5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information: Hazchem-Code: 2Y

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes. Provide adequate ventilation. Do not breathe vapour/aerosol. Wear appropriate protective equipment. Keep unprotected people away. Take off contaminated clothing.

6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

6.3 Methods and material for containment and cleaning up

Take up with non-flammable, liquid binding material (e.g. sand/earth/diatomaceous earth/vermiculit) and perform disposal according to instructions. Final cleaning.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Wear appropriate protective equipment. Provide adequate ventilation, and local exhaust as needed. Avoid contact with eyes. Do not breathe vapour/aerosol. Do not mix with other chemicals. Wash hands before breaks and after work. Take off contaminated clothing.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Store in a cool dry place. Keep only in the original container. Keep container tightly closed. Do not drop, drag or bang the container. Protect from direct sunlight. Avoid heat and light.

Hints on joint storage: Do not store together with reducing agents.

Further details: Heating will lead to pressure increase: Danger of bursting and explosion.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Additional information: Contains no substances with occupational exposure limit values.

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8.2 Exposure controls

Provide adequate ventilation, and local exhaust as needed.

Personal protection equipment

Occupational exposure controls

Respiratory protection: If vapours form, use respiratory protection.

Hand protection: Protective gloves according to EN 374.
Glove material: Nitrile rubber, PVC or butyl caoutchouc (butyl rubber)
Breakthrough time: >480 min.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to EN 166.

Body protection: Wear suitable protective clothing.

General protection and hygiene measures:

Change contaminated clothing. Do not breathe vapour/aerosol. Handle and open container with care. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. Wash hands before breaks and after work. Eye wash facility must be provided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Form: liquid Colour: colourless
Odour:	sweet
Odour threshold:	No data available
pH value:	approx. 7
Melting point/freezing point:	-4 °C
Initial boiling point and boiling range:	> 100 °C (1013 hPa)
Flash point/flash point range:	No data available
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Density:	at 20 °C: 1,09 g/mL
Water solubility:	miscible
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity, dynamic:	at 20 °C: 10 - 50 mPa*s (Rheo STV MS3)
Explosive properties:	No data available
Oxidizing characteristics:	No data available

9.2 Other information

Additional information: No data available

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SECTION 10: Stability and reactivity

10.1 Reactivity

refer to 10.3

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No dangerous reactions with proper and specified storage and handling

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

reducing agent

10.6 Hazardous decomposition products

Nitrogen oxides (NO_x). Emits toxic fumes under fire conditions.

Thermal decomposition: No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological effects: Acute toxicity (oral): Lack of data.
Acute toxicity (dermal): Lack of data.
Acute toxicity (inhalative): Lack of data.
Skin corrosion/irritation: Lack of data.
Eye damage/irritation: Lack of data.
Sensitisation to the respiratory tract: Lack of data.
Skin sensitisation: Lack of data.
Germ cell mutagenicity/Genotoxicity: Lack of data.
Carcinogenicity: Lack of data.
Reproductive toxicity: Lack of data.
Effects on or via lactation: Lack of data.
Specific target organ toxicity (single exposure): Lack of data.
Specific target organ toxicity (repeated exposure): Lack of data.
Aspiration hazard: Lack of data.

Other information: After resorption: Risk of the formation of methemoglobin.
Information about Potassium nitrate:
LD50 Rat, oral: 3750 mg/kg.

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Symptoms

In case of inhalation:

Inhaling hazardous decomposing products can cause serious health damage. Pulmonary edema is possible.

Symptoms may occur with delay.

In case of ingestion:

Intake of larger quantities can cause stomach troubles. damage of kidneys

After eye contact: May cause irritations.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

Information about Potassium nitrate:

Fish toxicity: EC / LC50: > 1000 mg/L /60h.

May contribute to the eutrophication of water supplies.

12.2 Persistence and degradability

Further details:

No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

General information:

Do not allow to enter into ground-water, surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number:

06 13 99 = Wastes from inorganic chemical processes not otherwise specified.

Recommendation:

Dispose of waste according to applicable legislation.

Contaminated packaging

Waste key number:

15 01 02 = Plastic packaging.

Recommendation:

Dispose of waste according to applicable legislation.

Non-contaminated packages may be recycled.

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SECTION 14: Transport information

14.1 UN number

ADR/RID, IMDG, IATA-DGR:

UN 3218

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

UN 3218, NITRATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.

14.3 Transport hazard class(es)

ADR/RID: Class 5.1, Code: O1

IMDG: Class 5.1, Subrisk-

IATA-DGR: Class 5.1

14.4 Packing group

ADR/RID, IMDG, IATA-DGR:

III

14.5 Environmental hazards

Marine pollutant: no

14.6 Special precautions for user

Land transport (ADR/RID)

Warning board: ADR/RID: Kemmler-number 50, UN number UN 3218
Hazard label: 5.1
Special provisions: 270 511
Limited quantities: 5 L
EQ: E1
Contaminated packaging - Instructions: P504 IBC02 R001
Special provisions for packing together: MP15
Portable tanks - Instructions: T4
Portable tanks - Special provisions: TP1
Tank coding: LGBV
Tunnel restriction code: E




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Sea transport (IMDG)

EmS:	F-A, S-Q	
Special provisions:	223, 270	
Limited quantities:	5 L	
Excepted quantities:	E1	
Contaminated packaging - Instructions:	P504	
Contaminated packaging - Provisions:	-	
IBC - Instructions:	IBC02	
IBC - Provisions:	-	
Tank instructions - IMO:	-	
Tank instructions - UN:	T4	
Tank instructions - Provisions:	TP1	
Stowage and handling:	Category B.	
Segregation:	SG38 SG49 SG62	
Properties and observations:	When involved in a fire, may cause an explosion. Leakage and subsequent evaporation of the water of the solutions may present increased dangers as follows: 1. in contact with combustible material (particularly with fibrous material such as jute, cotton or sisal) or sulphur, danger of spontaneous combustion; 2. in contact with ammonium compounds, powdered metals or oils, danger of explosion.	
Segregation group:	none	

Air transport (IATA)

Hazard label:	Oxidizer	
Excepted Quantity Code:	E1	
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y541 - Max. Net Qty/Pkg. 1 L	
Passenger and Cargo Aircraft:	Pack.Instr. 551 - Max. Net Qty/Pkg. 2.5 L	
Cargo Aircraft only:	Pack.Instr. 555 - Max. Net Qty/Pkg. 30 L	
Special provisions:	A3 A65 A803	
Emergency Response Guide-Code (ERG):	5L	

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations - Great Britain

Hazchem-Code: 2Y
No data available

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

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SECTION 16: Other information

Further information

Wording of the H-phrases under paragraph 2 and 3:

H272 = May intensify fire; oxidiser.

EUH210 = Safety data sheet available on request.

Reason of change: Changes in section 2: Labelling
Changes in section 3: Information on ingredients
General revision

Date of first version: 22/6/2009

Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.